

Title (en)

SELF-HEALING DENTAL COMPOSITES AND RELATED METHODS

Title (de)

SELBSTHEILENDE DENTALKOMPOSITE UND RELEVANTE VERFAHREN

Title (fr)

COMPOSITES DENTAUX D'AUTO-RÉGÉNÉRATION ET PROCÉDÉS AFFÉRENTS

Publication

EP 2152224 A4 20140416 (EN)

Application

EP 07795658 A 20070601

Priority

- US 2007013046 W 20070601
- US 80924807 A 20070531

Abstract (en)

[origin: WO2008147366A1] Dental restorative composites having self-healing capabilities to repair discontinuities in the composite are provided. Dental restorative composites according to the present invention include a microsphere that encapsulates a monomer. When a fracture occurs, the microsphere is ruptured and the monomer fills the fracture. Depending on the monomer present in the microsphere, it is polymerized by a polymerization initiator or by an olefin metathesis catalyst present in the dental restorative composite. Self-healing dental restorative composites provide increased resistance to fracturing, and thus remain substantially intact for a longer period of time, preserving the remedial integrity of the dental repair or reconstruction.

IPC 8 full level

A61K 6/083 (2006.01); **A61K 6/884** (2020.01); **A61K 6/891** (2020.01); **A61K 6/893** (2020.01); **A61K 6/896** (2020.01)

CPC (source: EP US)

A61K 6/887 (2020.01 - EP US); **A61K 6/891** (2020.01 - EP US); **A61K 6/893** (2020.01 - EP US); **A61K 6/896** (2020.01 - EP US)

Citation (search report)

- [YD] US 6518330 B2 20030211 - WHITE SCOTT R [US], et al
- [Y] US 2006063853 A1 20060323 - HURWITZ MAMI M [US], et al
- [Y] US 2006111469 A1 20060525 - WHITE SCOTT R [US], et al
- [Y] US 2006004158 A1 20060105 - MOSZNER NORBERT [LI], et al
- See references of WO 2008147366A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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JP 2013049697 A 20130314; JP 5678319 B2 20150304; MX 2009012999 A 20100126; US 2008300340 A1 20081204; US 8735463 B2 20140527

DOCDB simple family (application)

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